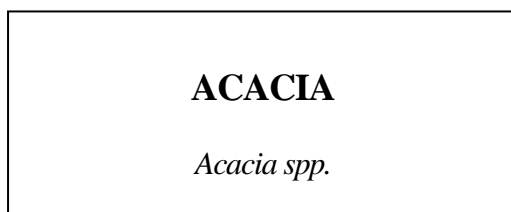


GUIDELINES  
FOR THE CONDUCT OF TESTS  
FOR DISTINCTNESS, UNIFORMITY AND STABILITY



Alternative Names:

Botanical Name	English	Local Name
<i>Acacia spp.</i>	Acacia	Akasia

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## **1.0 SUBJECT OF THESE TEST GUIDELINES**

These Test Guidelines apply to all varieties of Acacia mangium, Acacia auriculiformis and Acacia hybrid.

## **2.0 MATERIAL REQUIRED**

2.1 The competent authority decides on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of seedlings aged 3 months for vegetatively propagated variety and in the form of seeds for generatively (seed) propagated variety.

2.3 The minimum quantity of plant material, to be of supplied by the applicant, should be:

20 seedlings aged 3 months  
or  
10g of seeds

In the case of seed, the seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should be stated by the applicant.

2.4 The plant material supplied should be visibly healthy, not lacking in vigour, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment, which would affect the expression of the characteristics of the variety, unless the competent authority allows or requests such treatment. If it has been treated, full details of the treatment must be given.

## **3.0 METHOD OF EXAMINATION**

### **3.1. *Number of Growing Cycles***

The minimum duration of tests should normally be a single growing cycle within the age of 2 to 5 years.

The growing cycle considered to be the duration of a single growing season, beginning with bud burst, flowering and fruit development and concluding when the following dormant periods ends with the swelling of new season buds

### **3.2 *Testing Place***

Tests are normally conducted at one place. In the case of tests conducted at more

than one place, guidance is provided in TGP/9 “Examining Distinctness”.

### *3.3. Conditions for Conducting the Examination*

3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

#### *3.3.2 Stage of development for the assessment*

The optimal stage of development for the assessment of each characteristic is indicated by a letter in the second column of the Table of Characteristics. The stages of development denoted by each letter are described at Chapter 8.0.

#### *3.3.3 Observation of colour by eye*

Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part 1. These determinations should be made with the plant part placed against a white background.

### *3.4. Test Design*

3.4.1 Each test should be designed to result in a total of at least 10 spaced plants per replicate with plants spaced 3m x 3m, 4m x 3m or 4m x 4m.

3.4.2 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

### *3.5. Additional test*

Additional tests, for examining relevant characteristics, may be established.

## **4.0 ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY**

### *4.1. Distinctness*

#### *4.1.1 General Recommendations*

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

#### 4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

#### 4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction prior to making decisions regarding distinctness.

#### 4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, all observations should be made on 6 plants or parts taken from each of 6 plants. In the case of parts of plants, the number of samples to be taken from each of the plants should be 10.

#### 4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of Characteristics (see document TGP/9 “Examining Distinctness”, Section 4 “Observation of characteristics”):

- MG: single measurement of a group of plants or parts of plants
- MS: measurement of a number of individual plants or parts of plants
- VG: visual assessment by a single observation of a group of plants or parts of plants
- VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

“Visual” observation (V) is an observation made on the basis of the expert’s judgment. For the purposes of this document, “visual” observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, “G” provides a single record per variety and it is not possible or necessary to apply statistical methods in a

plant-by-plant analysis for the assessment of distinctness.

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

## **4.2     *Uniformity***

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

4.2.2 The assessment of uniformity for seed propagated varieties should be according to the recommendations for cross-pollinated varieties in the General Introduction.

4.2.3 The assessment of uniformity for hybrid varieties depends on the type of hybrid and should be according to the recommendations for hybrid varieties in the General Introduction.

4.2.4 For the assessment of uniformity, a population standard of 95% and an acceptance probability of at least 1% should be applied. In the case of a sample size of 6 plants, 1 off-type is allowed.

## **4.3     *Stability***

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new seed or plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

## **5.0     **GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL****

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

(a) Tree: Habit (Characteristic 1)

- (b) Stem: type of bark (Characteristic 7)
- (c) Stem: twisting (Characteristic 9)
- (d) Phyllode : shape of margin nearest to main vein (Characteristic 12)
- (e) Phyllode : shape of apex (Characteristic 14)
- (f) Floret : color (Characteristic 23)
- (g) Floret : position of stigma in relation to anthers (Characteristic 24)
- (h) Fruit: color of follicle (Characteristic 27)

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 “Examining Distinctness”..

## **6.0 INTRODUCTION TO THE TABLE OF CHARACTERISTICS**

### *6.1 Categories of Characteristics*

#### *6.1.1 Standard Test Guidelines Characteristics*

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

#### *6.1.2 Asterisked Characteristics*

Asterisked characteristics (denoted by \*) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

### *6.2 States of Expression and Corresponding Notes*

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

### *6.3 States of Expression and Corresponding Notes*

6.2.1 States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.2.2 In the case qualitative and pseudo-qualitative characteristics (see Chapter 6.3), or relevant states of expression are presented in the characteristic. However, in the case of characteristic with 5 or more states and abbreviated scale may be used to minimize the size of Table of Characteristics. For example, in the case of quantitative characteristics with 9 states, the presentation of states of

expression in the test guidelines may be abbreviated as follows:

State	Note
Small	3
Medium	5
Large	7

However, each should be noted that all of the following 9 states of expression exist to described varieties and should be used as appropriate:

State	Note
Very small	1
Very small to small	2
Small	3
Small to medium	4
Medium	5
Medium to large	6
Large	7
Large to very large	8
Very large	9

6.2.3. Further explanation of the presentation of states of expression and notes is provided in document TGP/7 “Development of Test Guidelines”.

#### 6.4 *Types of Expression*

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

#### 6.4 *Example Varieties*

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

#### 6.5 Legend

(\*) Asterisked characteristic – see Chapter 6 (Section 6.1.2)

QL Qualitative characteristic – see Chapter 6 (Section 6.3)

QN Quantitative characteristic – see Chapter 6 (Section 6.3)

PQ Pseudo-Qualitative characteristic – see Chapter 6 (Section 6.3)

MG, MS, VG, VS - see Chapter 4.1.5

(a) – (e) See Explanations on the Table of Characteristics in Chapter 8.1.

(+) See Explanations on the Table of Characteristics in Chapter 8



## 7.0

## TABLE OF CHARACTERISTICS

NO.		CHARACTERISTIC	STATE	EXAMPLE VARIETIES	NOTE
1. (*) (+) QL	VG	Tree: habit	upright	SAFODA- Koshii Acacia Hybrid- 1	1
			drooping	SAFODA- Koshii Acacia Hybrid- 2	2
2. (*) QN	MS	Tree: height	short		3
			medium		5
			tall		7
3 (+) (QN)	VG	Tree: forking	absent		1
			present		9
4. (*) (+) PQ	VG (a)	<u>Only for varieties: tree: forking:</u> <u>absent:</u> stem: wavering	absent or very weak		1
			medium	SAFODA- Koshii Acacia Hybrid- 1	3
			strong	SAFODA- Koshii Acacia Hybrid-5	5
5. (*) (+) QN	MS (a)	<u>Only for varieties: tree: forking:</u> <u>absent:</u> stem : diameter	narrow		3
			medium		5
			broad		7

NO.		CHARACTERISTIC	STATE	EXAMPLE VARIETIES	NOTE
6.	VG	<u>Only for varieties: tree: forking:</u> <u>absent:</u> stem : shape of cross section	round	SAFODA- Koshii Acacia Hybrid-1	1
(+)	(a)		round – oval		2
PQ			oval		3
			oval - fluted		4
			fluted		5
7.	VG	Stem : type of bark	smooth	SAFODA- Koshii Acacia Hybrid-1	1
(*)	(a)		flaky		2
(G)			fissured	SAFODA- Koshii Acacia Hybrid-2	3
(+)					
QL					
8.	VG	Stem : bark color	white	SAFODA- Koshii Acacia Hybrid-1	1
	(a)		white green		2
PQ			white brown		3
			brown		4
			red brown		5
			dark brown		6
9.	VG	Stem : twisting	absent	SAFODA- Koshii Acacia Hybrid-1	1
(*)	(a)		present		9
(+)					
QL					

NO.		CHARACTERISTIC	STATE	EXAMPLE VARIETIES	NOTE
10. (*)	VG	Branch : attitude	upright	SAFODA- Koshii Acacia Hybrid-16	1
QN			semi –upright	SAFODA- Koshii Acacia Hybrid-1	2
			horizontal	SAFODA- Koshii Acacia Hybrid-12	3
11. (*)	VG	Branch : branch size relative to main stem	fine	SAFODA- Koshii Acacia Hybrid-1	3
(+)			medium	SAFODA- Koshii Acacia Hybrid-5	5
PQ			coarse		7
12. (*)	VG	Phyllode : shape of margin nearest to main vein	concave	SAFODA- Koshii Acacia Hybrid-3	1
(+)	(b)		straight	SAFODA- Koshii Acacia Hybrid-1	2
PQ			convex	SAFODA- Koshii Acacia Hybrid-9	3
13. (+)	MS	Phyllode : angle of opposite leaf margin to the main vein at the base of phyllode	narrow	SAFODA- Koshii Acacia Hybrid-16	1
QN	(b)		medium	SAFODA- Koshii Acacia Hybrid-1	2
			broad	SAFODA- Koshii Acacia Hybrid-9	3
14. (*)	VG	Phyllode : shape of apex	acute	SAFODA- Koshii Acacia Hybrid-1	1
(+)	(b)		rounded		2
QL					

NO.		CHARACTERISTIC	STATE	EXAMPLE VARIETIES	NOTE
15.	VG	Phyllode: curvature of apex	absent or very weak		1
(+)	(b)		medium		2
QN			strong		3
16.	MS	Phyllode : number of secondary vein attached to the main vein	none	SAFODA- Koshii Acacia Hybrid-1	1
(*)	(b)		one		2
(+)			two		3
QL			three	SAFODA- Koshii Acacia Hybrid-2	4
			more than three		5
17.	MS	Phyllode : length	short		3
(*)	(b)		medium		5
(+)			long		7
QN					
18.	MS	Phyllode : width	narrow		3
(*)	(b)		medium		5
(+)			broad		7
QN					
19.	MS	Phyllode : ratio of length to width	small		3
(*)	(b)		medium		5
QN			large		7
20.	VG	Petiole : shape	straight	SAFODA- Koshii Acacia Hybrid-1	1
(+)	(b)		bend	SAFODA- Koshii Acacia Hybrid-2	2
QL					

NO.		CHARACTERISTIC	STATE	EXAMPLE VARIETIES	NOTE
21. (*)  QN	VG  (b)	Petiole : anthocyanin coloration	absent or very weak  weak  medium  strong	SAFODA- Koshii Acacia Hybrid-1	1  2  3  4
22. (*)  (+)  QN	MS	Inflorescence: length	short  medium  long		3  5  7
23. (*) (G)  PQ	VG  (c)	Floret : color	white  yellow	SAFODA- Koshii Acacia Hybrid-1	1  3
24. (*) (G)  (+)  QL	VS  (c)	Floret : position of stigma in relation to anthers	below  same level  above	SAFODA- Koshii Acacia Hybrid-1	1  2  3
25. (*)  (+)  QN	MS	Spike: length	short  medium  long		3  5  7
26. (*)  (+)  PQ	VG	Fruit : shape of pod in cross section	linear  oblong  rounded	SAFODA- Koshii Acacia Hybrid-1	1  3  5
27. (*)  QL	VG  (d)	Fruit: color of follicle	yellow  orange	SAFODA- Koshii Acacia Hybrid-2	1  2

NO.		CHARACTERISTIC	STATE	EXAMPLE VARIETIES	NOTE
28. (*) (+) QN	VG  (d)	Fruit: coverage of follicle	non		1
			quarter	SAFODA- Koshii Acacia Hybrid-9	3
			half	SAFODA- Koshii Acacia Hybrid-3	5
			three quarter	SAFODA- Koshii Acacia Hybrid-1	7
			fully		9

## 8.0 EXPLANATIONS ON THE TABLE OF CHARACTERISTICS

### 8.1 Explanations covering several characteristics

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

- (a) Otherwise indicated, all observations on the stem should be made on stem at the level of 1.0 to 1.5 m from ground.
- (b) All observations on phyllode and petiole should be made on fourth phyllode from tip of branch and on fully developed matured phyllode.
- (c) Observation on floret should be made on spike at the time when 75% of the floret had opened.
- (d) Observation on color of follicle should be made on matured opened pod.

### 8.2 Explanations for individual characteristics

#### Ad. 1: Tree: form



1  
erect



2  
willow

Ad.3: Tree: forking

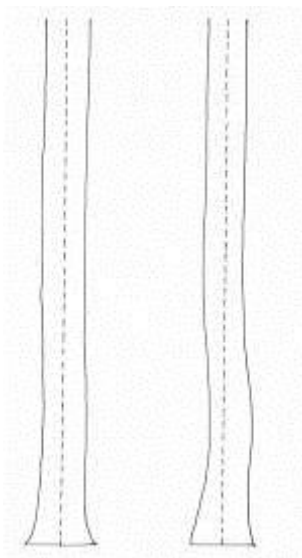


1  
absent

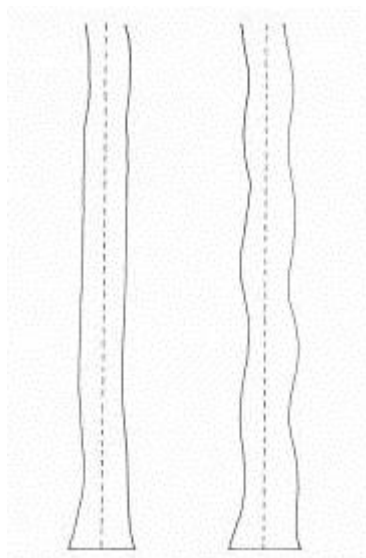


9  
present

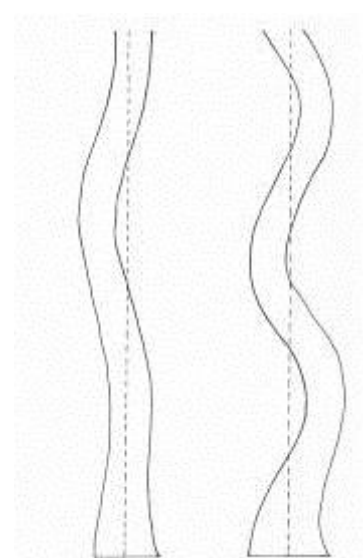
Ad. 4: Only for varieties: tree: forking: absent: stem: wavering



1  
absent or  
very weak



3  
medium



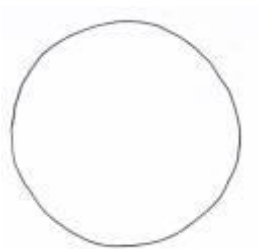
5  
strong



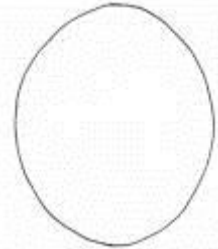
Ad. 5: Only for varieties: tree: forking: absent: stem : diameter

Diameter = Girth /  $\pi$

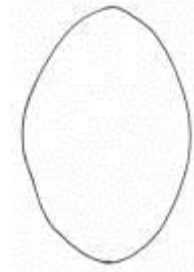
Ad. 6: Only for varieties: tree: forking: absent: stem : shape of cross section



1  
round



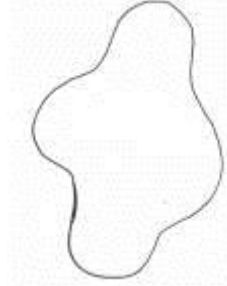
2  
round-oval



3  
oval



4  
oval-fluted



5  
fluted

Ad. 7: Stem: type of bark



1  
smooth



2  
flacky



3  
fisured

Ad. 8: Stem: bark color

Observation on bark color of stem should be made 3 metres away from the tree.

Ad. 9: Stem: twisting



1  
absent

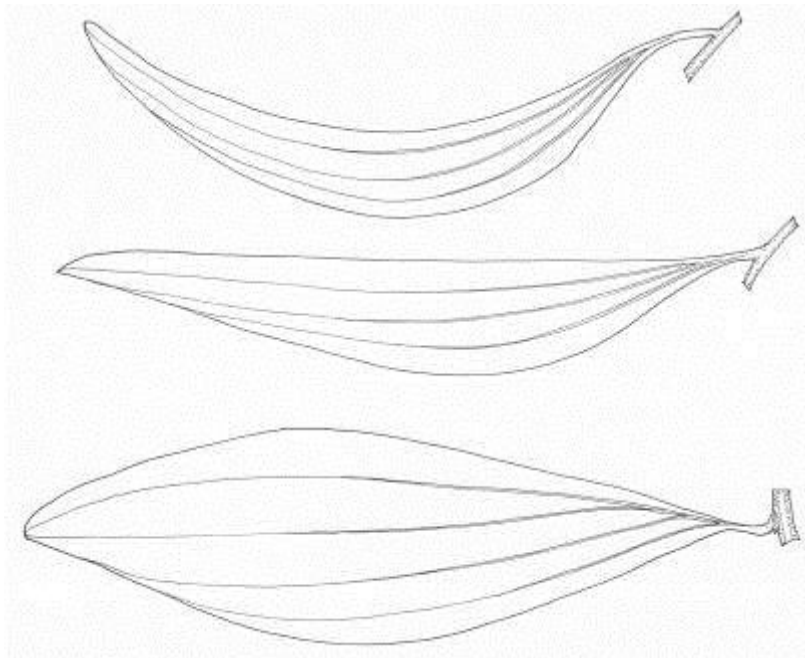


9  
present

Ad 11. : Branch: branch size realative to main stem

3	fine	: less than $\frac{1}{4}$
5	medium	: between $\frac{1}{4}$ - $\frac{1}{2}$
7	coarse	: more than $\frac{1}{2}$

Ad. 12: Phyllode: shape of margin nearest to main vein

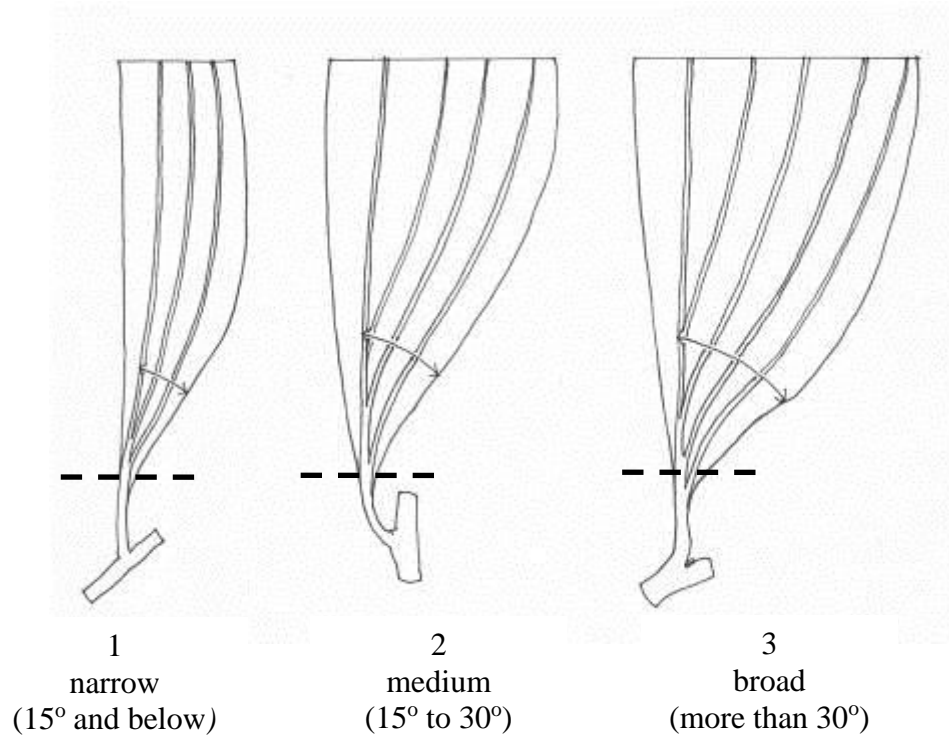


1  
concave

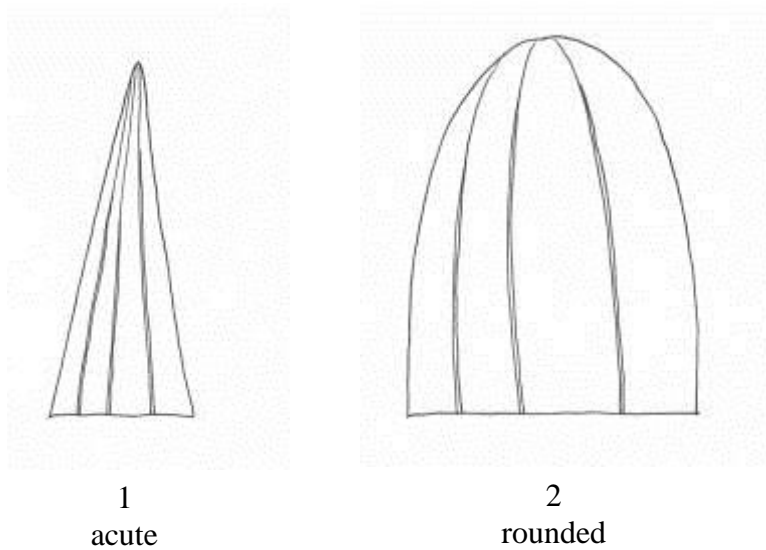
2  
straight

3  
convex

Ad. 13: Phyllode: angle of opposite leaf margin to the main vein at the base of phyllode



Ad. 14: Phyllode: shape of apex



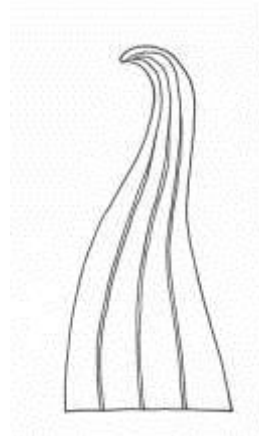
Ad. 15: Phyllode: curvature of apex



1  
absent or  
very weak

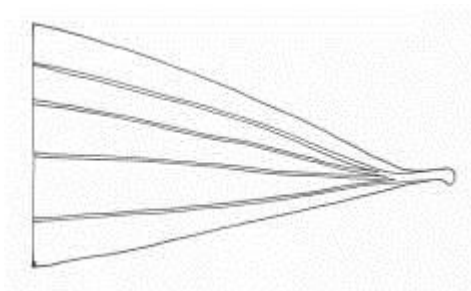


2  
medium

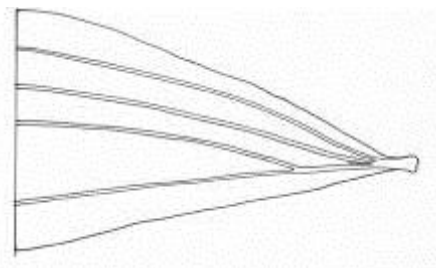


3  
strong

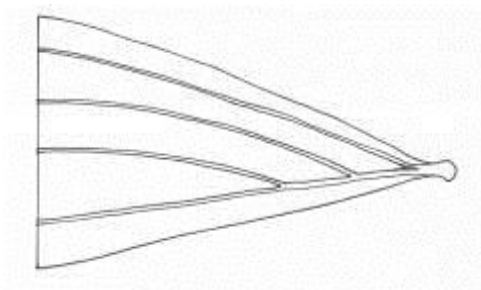
Ad. 16: Phyllode number of secondary vein attached to the main vein



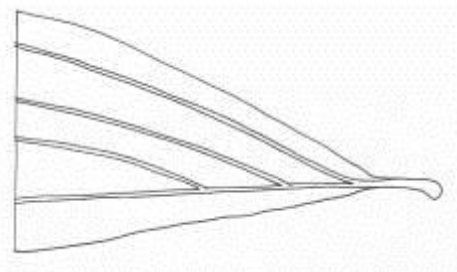
1  
none



2  
one



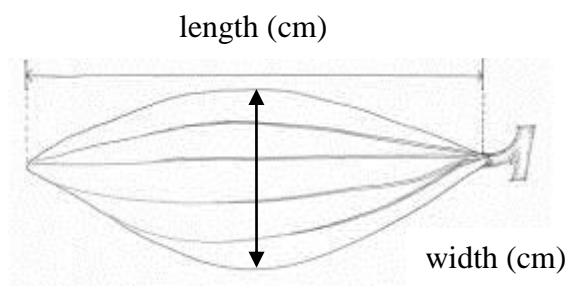
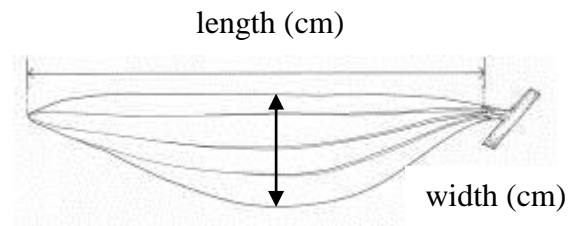
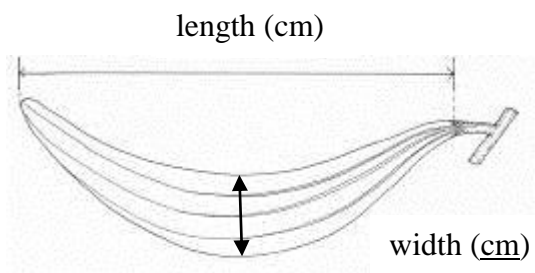
3  
two



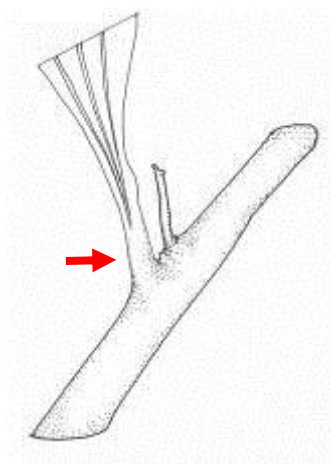
4  
three

Ad. 17: Phyllode: length

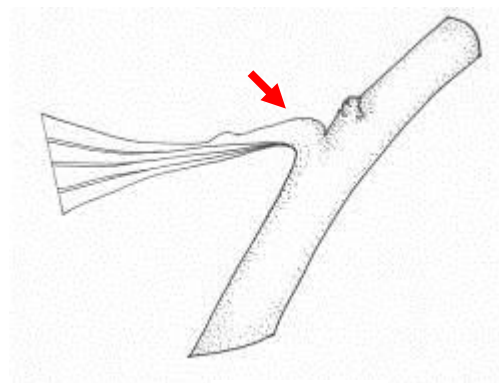
Ad. 18: Phyllode: width



Ad. 20: Petiole: shape

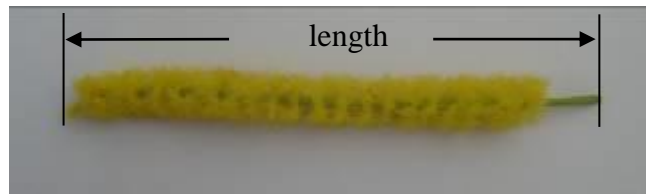


1  
straight

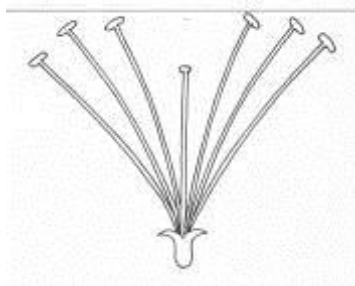


2  
bend

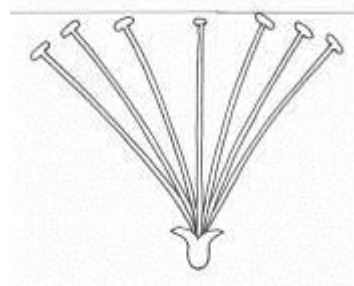
Ad. 22: Inflorescenc : length



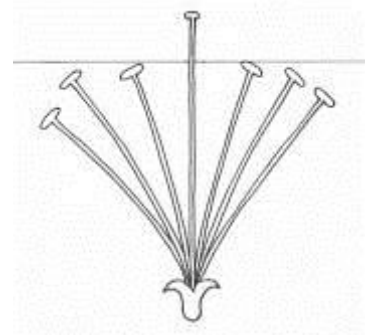
Ad. 24: Floret: position of stigma in relation to anthers



1  
below

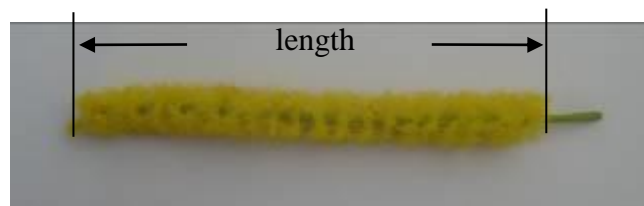


2  
same level



3  
above

Ad. 25: Spike: length



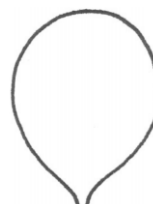
Ad. 26: Fruit : shape of pod in cross section



1  
linear



3  
oblong



5  
rounded

Ad. 28: Fruit: coverage of follicle



1  
non



3  
quarter



5  
half



7  
three quarter

9  
fully



## 9.0 LITERATURE

Ab. Rasip, A.G., Mohd Zaki, A., Mohd Noor, M. and Abdul Rahman, A.J. (2000). Panduan Pemilihan Pokok Pilihan (Plus Tree). Lecture notes presented at the Course on the Establishment and Management of Seed Production Areas ", 21-26 August 2000, Bintulu, Sarawak.

Les Pedley . 1986. Australian Acacias: Taxonomy and Phytogeography. Ed. Turnbull J. In proceeding of an international workshop of Australian Acacias in Developing Country. Gympie, Qld. Australia, 4-7 August 1986. Pp 11-16

Pinyopusarerker, K., William, E.R. & Boland, D.J. 1991. Variation in seedling Morphology of *Acacia auriculiformis*. Ed. Turnbull J. In proceeding of an international workshop of Advances in Tropical Acacias Reserach. Bangkok, Thailand 11-15 February 1991. Pp 67-72.

Thomas, K. I. & Kent, G. A. 1986. Growth of *Acacia mangium* Throughout Sabah. Ed. Turnbull J. In proceeding of an international workshop of Australian Acacias in Developing Country. Gympie, Qld. Australia, 4-7 August 1986. Pp 160-163

Yap, S.K. 1986. Introduction of *Acacia* species to Peninsular Malaysia. Ed. Turnbull J. In proceeding of an international workshop of Australian Acacias in Developing Country. Gympie, Qld. Australia, 4-7 August 1986. Pp 151-153

Zakaria Ibrahim & Kahmis Awang. 1991. Comparison of floral Morphology, Flower Production and plooen Yield of *Acacia mangium* and *A. auriculiformis*. Ed. Turnbull J. In proceeding of an international workshop of Advances in Tropical Acacias Reserach. Bangkok, Thailand 11-15 February 1991. Pp 26-29

Zobel, B & Talbert, J. 1984. Applied Forest Tree improvement. New York. John Wiley & Sons.

## 10. TECHNICAL QUESTIONNAIRE

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
<p style="text-align: center;"><b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights</p> <p style="text-align: center;">In the case of hybrid varieties which are the subject of an application for plant breeders' rights, and where the parent lines are to be submitted as a part of the examination of the hybrid variety, this Technical Questionnaire should be completed for each of the parent lines, in addition to being completed for the hybrid variety.</p>		
<p>1. Subject of the Technical Questionnaire</p> <p>1.1 Botanical name <input type="text" value="Acacia spp."/></p> <p>1.2 Common name <input type="text" value="Acacia"/></p>		
<p>2. Applicant</p> <p>Name <input type="text"/></p> <p>Address <input type="text"/></p> <p>Telephone No. <input type="text"/></p> <p>Fax No. <input type="text"/></p> <p>E-mail address <input type="text"/></p> <p>Breeder (if different from applicant) <input type="text"/></p>		
<p>3. Proposed denomination and breeder's reference</p> <p>Proposed denomination (if available) <input type="text"/></p> <p>Breeder's reference <input type="text"/></p>		

#### 4 .Information on the breeding scheme and propagation of the variety

##### 4.1 Breeding scheme

Variety resulting from:

##### 4.1.1 Crossing

(a) controlled cross [ ]  
(please state parent varieties)

(.....) x (.....)  
female parent male parent

(b) partially known cross [ ]  
(please state known parent variety(ies))

(.....) x (.....)  
female parent male parent

(c) totally unknown cross [ ]

4.1.2 Mutation [ ]  
(please state parent variety)

.....

4.1.3 Discovery and development [ ]  
(please state where when and how developed)

.....

4.1.4 Other ☐ ☐  
(please provide details)

.....  
.....

4.2 Method of propagating the variety

#### 4.2.1 Seed-propagated varieties

(a) Self-pollination [ ] (b) Cross-pollination [ ] (i) population [ ]

(ii) synthetic variety [ ]

(c) Hybrid [ ]

In the case of hybrid varieties the production scheme for the hybrid should be provided on a separate sheet. This should provide details of all the parent lines required for propagating the hybrid e.g.

##### Single Hybrid

(.....) x (.....)  
female parent male parent

##### Three-Way Hybrid

(.....) x (.....)  
female parent male parent

(.....) x  
(.....)  
single hybrid used as female parent male parent

and should identify in particular:

- (a) any male sterile lines
- (b) maintenance system of male sterile lines

(d) Other [ ]

(Please provide detail)

# Authority may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE		Page {x} of {y}		Reference Number:
5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds)				
Characteristics		Example Varieties		Note
5.1 (24)	Floret: position of stigma in relation to anther	below		1 [ ]
		same level		2 [ ]
		above		3 [ ]



TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in Section 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes [ ] No [ ]

(If yes, please provide details)

7.2 Special conditions for the examination of the variety

7.2.1 Are there any special conditions for growing the variety or conducting the examination?

Yes [ ] No [ ]

7.2.2 If yes, please provide details

7.3 Other information

A representative color photograph of the variety should accompany the Technical Questionnaire.

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

If the answer to (b) is yes, please attach a copy of the authorization.



TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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9. Information on plant material to be examined.

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

- (a) Microorganisms (e.g. virus, bacteria, phytoplasma) Yes [ ] No [ ]
- (b) Chemical treatment (e.g. growth retardant, pesticide) Yes [ ] No [ ]
- (c) Tissue culture Yes [ ] No [ ]
- (d) Other factors Yes [ ] No [ ]

Please provide details for where you have indicated “yes”.

.....

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature  Date

[End of document]